

**EMCON**

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May 20, 1996
Project 20H93-001.006

Mr. Jim Ross
Section Chief, Site Cleanup Unit
California Regional Water Quality Control Board
Los Angeles Region
101 Center Plaza Drive
Monterey Park, California 91754-2156

Re: (File No. 95-066), Response to RWQCB February 13, 1996, Review Letter
Dial Main Facility, 9300 Rayo Avenue, South Gate.

RECEIVED
96 MAY 22 PM 1:07
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

Dear Mr. Ross:

As part of a voluntary cleanup agreement with The Dial Corp. (Dial), the California Regional Water Quality Control Board-Los Angeles Region, Site Cleanup Unit (RWQCB) has reviewed and provided comments (February 13, 1996) on previous assessment and remedial activities performed at the former Main Facility at 9300 Rayo Avenue, South Gate. On May 8, 1996, EMCON and representatives from Dial and the Quantum Management Group, Incorporated (Quantum) met with the RWQCB to discuss the contents of the RWQCB February 13, 1996 letter. The intent of the meeting was to present EMCON's approach to closure of the Dial Main facility and our approach to resolution of the risk assessment procedures for an area of dodecylbenzene-impacted soils. This letter provides a summary of those discussions and our response to the RWQCB comments, one through ten contained in the February letter. Comments and alternative procedures regarding the risk assessment submitted by EMCON for the dodecylbenzene-impacted soils in the area of the alkylate unloading sump will be submitted at a later date.

A specific response to each of the RWQCB comments is provided below:

COMMENT

1. *During a site visit on December 6, 1995, staff noted that a number of sumps and equipment mounting pads inside several buildings have not been identified. We will require that all potential sources of contamination such as floor drains, sumps, and equipment pads be identified and its locations surveyed before the facility is decommissioned.*

RESPONSE

Site demolition operations commenced during the week of April 8, 1996. Surveying of structures as requested by the RWQCB was completed that week and the information is shown on Drawing 1, which was submitted at the May 8, 1996 meeting.

COMMENT

2. We will require proper closure of all USTs, sumps, floor drains, clarifiers, trenches, and AGTs. In addition, we will require that all sumps, floor drains, trenches, and clarifiers be tested for formaldehyde.

RESPONSE

USTs: With the exception of the Building 8 Tank, all underground storage tanks (USTs) were removed and excavated in 1984. Exploratory soil borings were drilled through the location of these former tanks and soil samples were analyzed for the appropriate petroleum hydrocarbon compounds. No additional exploratory measures are proposed for former tank areas. In areas where hydrocarbons were reported (Old Garage Area and Laboratory and Building 8) additional site assessment was performed to determine the extent of soil impacts. Remediation was performed and has been completed in the area of the Old Garage tanks. A LUFT risk assessment was proposed for residual hydrocarbon-impacted soils in the area of the 4200-gallon Fuel Oil Tank closed in place below the southwestern corner of Building 8. To date we have not received a response from the RWQCB on our risk-based approach for no further action in the area of this tank. *note*

The former 100-gallon gasoline tank under the water tank central to the Main Facility was the only tank that was not investigated directly during previous assessments. As described below this tank will be investigated when the water tank is removed.

Clarifiers, Sumps, and Drains: Attached is a table outlining our approach for closure of the clarifiers and sumps at the site. The attached drawing shows those facilities that have been sampled before (green) and the sump, trenches and clarifiers that have not been sampled (red) by previous assessment programs. Those facilities, that have been sampled and the soil samples collected did not contain analytes with detectable concentrations or concentrations which would indicate a release, will not be resampled. Those facilities that did contain detectable concentrations indicating a possible release or have not been sampled will be closed and sampled according to the schedule in Table 1.

The clarifiers at the south gate and those due north of tanks 47 - 50 will not be closed and will remain as part of the stormwater management system.

Above-ground Storage Tanks (AGTs): Most of the above-ground storage tanks (AGTs) are elevated on skirts or stands and can be visually inspected to determine if a release had occurred. The majority of the tanks are also flanged at the base to above-ground conveyance piping and as such do not represent a point source for discharge of contained liquids. Lastly, the tanks that contained a potentially hazardous material were set on concrete and contained in a bermed area. Any release from an AGT in a bermed area would be contained.

EMCON, therefore, proposes to use an observational method to assess if there has been a release from an AGT. Step one will be to observe the closure and removal of the tanks and the condition of the containment area and concrete. Each containment area, upon removal of the tanks, will be assessed separately to determine if there was a release that could have penetrated the concrete. This area will be marked and checked as the concrete is removed. the second step will involve visual inspection of the soils directly underneath the concrete after it has been removed. Areas that are stained or exhibit any odor will be sampled for analytes consistent with what was contained in the AGTs within the bermed area. In addition, those areas identified which may have acted as conduits through the concrete will be sampled, if a release is indicated by the soil condition. At a minimum, one sample for every 1000 square feet of containment area will be collected for analysis of those constituents contained in the AGTs. Samples collected as part of the minimum program will be uniformly distributed throughout the AGT containment area. As minimum, two (2) soil samples will be collected from each AGT containment area as shown on Drawing 2. Tanks 47 through 50 containment area will not be sampled, because these tanks will remain as part of the storm water management system. Tanks 73 through 87 will also not be sampled, because these tanks are one or more stories above the building floor and are part of the building superstructure. *ok*

We believe this program is sufficiently rigorous to assess if there has been a release in an AGT containment area. Please note that those facilities which have a higher potential for a release to the subsurface, such as sumps, drains or clarifiers, will be sampled or have already been sampled separately within each containment area as described above and shown on Table 1. Additionally, many of the containment areas have been sampled previously (S-9, S-10, S-13, and S-14) and soil samples analyzed for pH, chloride, TPH and phosphates.

Formaldehyde: Formaldehyde was stored and used in specific areas of the Main Area Facility and as such was analyzed for previously in these specific locations. Soil samples collected from borings drilled adjacent to waste management facilities (i.e., B-25; sump eastside AGT containment area, east of Building 8) which were adjacent to areas where formaldehyde was used, did not contain detectable concentrations of this analyte above method reporting limits. It would be reasonable to expect that if formaldehyde were

released it would be released in the areas where it was handled, not ubiquitously over the site. Additional analysis for formaldehyde upon closure of facilities in the areas where it was or could have been used is proposed (sumps or clarifiers in the vicinity of Building 2, trench drain between building 1 and 14, and AGT samples in the area of Tank 46).

COMMENT

3. Benzene has been detected at elevated concentrations in MW-6 and MW-7. You are required to delineate the extent of this groundwater plume.

RESPONSE

Three (3) groundwater monitoring wells are proposed on the Main Facility property, south of wells MW-6 and MW-7 (Drawing 2). One well will be placed directly downgradient of MW-6 and MW-7 near the southern property line. The second well will be placed at a point midway between well MW-2 and MW-7, in the area north of tank 6 (soda ash) and due east of Building 8. The third well will be located southwest of well MW-7, due west of the former chloride tanks and building 1. The third well will be situated between well MW-3 and MW-7. The wells will be installed using hollow stem auger drilling equipment consistent with applicable RWQCB and State guidelines. So as not to interfere with the demolition operations and subject the wells to potential damage, the wells will be installed after the buildings have been demolished and the concrete and asphalt have been removed.

COMMENT

4. Groundwater sampling results from MW-2 indicated elevated concentrations of chloride and benzene at concentrations above MCLs. We will require that the extent of this groundwater problem be delineated.

RESPONSE

Benzene: Benzene has been reported in groundwater samples collected from well MW-2 at concentrations ranging from 1.4 to 4 µg/L since initial sampling operations began in April 1992. Benzene has shown a progressive decline in concentration in groundwater samples collected from this well since September 1993 with the most recent concentration near State drinking water standards. Based on assessment sampling to date, benzene has only been reported in soil samples collected in the area of the Old Garage and Laboratory Area. Benzene was not reported in soil samples collected from the Building 8 underground storage tank or in the area of the Alkylate Unloading Sump. Both of these areas are more proximal to well MW-2 than the Old Garage and Maintenance Facility. With the monitoring data gathered to date, a low benzene concentration in the area of well MW-2 could be explained by a gradual concentration decline from a source area in the vicinity of

wells MW-6 and MW-7. Additional monitoring data appears warranted, as well as an analysis of the groundwater between the suspected source area and well MW-2. It is anticipated with a source removal program completed in the area of the Old Garage and Maintenance Facility that benzene concentrations should decline over time along the fringes of the plume.

Given the apparent decline and low concentration in benzene in groundwater samples collected from Well MW-2 and its distance from the apparent source area (Old Garage and Laboratory), further definition at this time does not seem warranted. Rather, further monitoring should be conducted to verify the declining benzene concentration in this well and the monitoring data from the proposed well to be installed between well MW-7 and MW-2 should be evaluated to determine if the source area for benzene at the site was the former tanks adjacent to the Old Garage and Laboratory Area.

Although not considered to date, the Chevron pipeline within the easement along the eastern property boundary should also be considered a potential source for the low concentrations of benzene reported in groundwater samples from this area.

Chloride: Chloride has only been analyzed once from groundwater samples collected from well MW-2, at the initial assessment sampling event in April, 1992. Chloride was reported in the groundwater sample collected in April, 1992 at a concentration of 1700 mg/L. Chloride concentrations in the other wells sampled (MW-1 and MW-3) ranged from 360 and 560 mg/L. Because of the lack of monitoring data for chloride, EMCON proposes to add this analyte to its semiannual monitoring program for the wells on the Main Area Facility.

COMMENT

5. Building 5 housed 16 AGT's which stored detergent. We will require that this area be tested for Methylene Blue Activated Substances.

RESPONSE

As described above, additional sampling is proposed along the floor drains, sumps and systematically as part of AGT containment area closure. MBAS will be included as an analyte for the soil samples collected as part of the closure of these facilities.

COMMENT

6. We have determined that sampling has not been performed in the following area:

- Former 100 gallon gas tank north of former Building 3.*

- *Fuel Oil Tank 0224 and Alkane Oil Tank 0223*
- *Lube Oil Storage Area in Building 6*

RESPONSE

One hand auger boring will be drilled to a depth of five (5) feet below the ground surface through each of these facilities upon their demolition. A soil sample will be collected at a depth of 5 feet bgs from each hand augered boring and analyzed for the appropriate petroleum hydrocarbon compounds. Soil samples from each area will be analyzed for petroleum hydrocarbons by U.S. EPA Method Modified 8015 (Fingerprint) and the soil sample from below the former 100-gallon fuel tank will be additionally analyzed for BTEX. The hand auger borings will be installed and finally located upon removal of the concrete and inspection of the soils for staining or hydrocarbon odors.

In addition, the areas within building 6 that have been identified with noticeable oil stains or existing oil on the surface of the concrete will be sampled upon removal of the slab (see Drawing 2). One sample from each area will be collected from soils underlying the concrete and analyzed for petroleum hydrocarbon content by U.S. EPA Method 418.1.

COMMENT

7. *In addition, we have determined that the following analyses are missing from the following area:*

Location	Boring Number	Analyses Required
Drum fluid dispensing area be Building 2	S-2	VOCs
Caustic unloading area north of Building 6	S-7	pH
Oil compressor near Building 7	S-8	SVOCs
Above ground tank area west of Building 8	S-13	ammonia, MBAS
Old cooling tower east of Building 4	S-14	ammonia
Trench between Building 1 & 4	B-2	formaldehyde
Pump sump nest to Building 2 bleach tank	B-3	chloride
Clarifier near south gate	B-9	VOCs
Sump east of Building 4 and old cooling	B-11	formaldehyde
Salt brine tanks along railroad track	B-8	TDS
Above ground tank area east of Building 8	B-17	ammonia

RESPONSE

Unless otherwise indicated below these additional analysis will be done consistent with closure of a sump or clarifier or by collecting a soil sample using a hand auger at a depth of 5 feet bgs or in the case of the clarifier adjacent to the south gate an exploratory soil boring (B-9) drilled to 45 feet bgs.

Oil Compressor near Building 7 (S-8): We are unclear why the RWQCB has requested semivolatile organic compound (SVOCs) analysis for a compressor area adjacent to Building 7. If the concern for these compounds (possibly PCBs) is that they may be included (co-solved) in the compressor oils, petroleum hydrocarbons were not reported (<10 mg/kg) in the sample S-8. *if TPH is present w/ heat then PAH may be present.*

As an alternative approach, as the concrete is removed from the building 6 area, and stained soils are observed, soil samples will be collected. Those areas within Building 6 where surface spills have occurred have been surveyed (see Drawing 1).

Above-ground tank west of Building 8 (B-17): The RWQCB has requested that this area be sampled for ammonia. This area has two (2) tanks which contained sulfonic acid. It is unclear why ammonia is a requested analyte in an area that contains acid. Soil samples from boring S-17 were previously analyzed for pH. Additionally, as the AGTs are closed in this area, should surface containment conditions or soil conditions upon concrete removal indicate that a release had occurred, additional soil samples will be collected and analyzed for pH. *Check notes
Check what's in AGT.
ok*

Sump east of Building 4 and Old Cooling Tower (B-11): Formaldehyde is requested upon closure of this sump. This sump would not have been involved in the waste stream management of formaldehyde, given the known use of its compound and its storage at the site. No additional sampling is proposed at this time for this analyte and the closure of this sump.

Salt Brine Tanks along the Railroad Tracks (B-8): As described below, recent investigation of this area indicates that boring B-8 was probably drilled adjacent to a caustic unloading area. Sampling for TDS would not be appropriate for this area.

COMMENT

8. A Phase III Site Assessment Report identified Tank No. 6 in the Raw Material Storage Area as a diesel tank. However, your recently submitted drawing shows the tank as containing soda ash. Please clarify this discrepancy.

RESPONSE

The contents of tank 6 were Soda Ash. The confusion may be that the 4200-gallon fuel oil tank under the southwestern corner of Building 8 is proximal to tank 6 and that the Phase III report figure was not precise in its labeling of the tank.

COMMENT

9. The purpose of B-8 is to assess the impact of the salt brine tanks, located along the railroad tracks. Drawing No. 1 shows that the salt brine tanks are located between Building 1 and Building 14, and are approximately 60 feet away from B-8. Please clarify this discrepancy.

RESPONSE

Recent investigation, shows boring B-8 was probably next to a caustic unloading area similar to where sample S-7 was collected (see recent surveyed map). The sampling scheme for boring B-8 was the same as surface sample S-7 and included analysis for phosphate and chlorides.

COMMENT

10. The following items are not shown on the recently submitted drawing:

- Two clarifiers related to B-9.*
- Oil compressor related to Sample S-8, near Building 7.*
- Former Chlorine Tank in Building 3.*

RESPONSE

The two clarifiers related to boring B-9 are the same as those adjacent to well MW-3. Boring B-9 was the pilot boring for well MW-3 (Drawing 1).

The oil compressor adjacent to sample S-8 has been removed and is too small to show on the drawings. The compressor was contained in a concrete bermed area adjacent to the building.

The former chlorine tank, effectively encompassed the entire footprint of Building 3 (Drawing 1).

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CLOSING

At this time, demolition of the facility buildings is progressing according to schedule. Buildings 4 and 15 have been torn down and asbestos abatement work has been completed. Initial concrete removal which will include sump and clarifier closure is tentatively scheduled for early June, 1996. A schedule provided by The Environmental Group (TEG) for facility demolition was presented at our May 8, 1996 meeting and will be amended as appropriate, to reflect the progress of the demolition effort.

A workplan will be prepared for RWQCB incorporating our approach as described above for the closure of the Dial Main Facility, South Gate. In addition to our comments above, the workplan will also outline our confirmatory soil boring program to close the soil vapor extraction system in the area of the Old Garage and Laboratory. This plan will incorporate a site plume and isoconcentrations maps depicting subsurface conditions prior to remediation for the RWQCB review, in addition to the location of our three proposed exploratory soil borings. We anticipate that a workplan can be submitted to the RWQCB for review and concurrence by the end of May, 1996.

Thank you in advance for your attention to this matter and your staff's cooperation in oversight of this project. If you have any questions or comments, please contact me at your earliest convenience.

Sincerely,

EMCON



Michael E. Flack, R.G.
Project Manager

Attachments: Table 1 - Proposed Sump, Clarifier, and Drain Closure Sampling Plan
Drawing 1 Site Plan
Drawing 2 Site Plan Showing Facilities and Above Ground Tanks to Be Closed

cc: John Ferguson, Dial Corp.
John Lang, Quantum Management Group, Inc.
Jenny Au, RWQCB
Mark Stelljes, EMCON

TABLE 1
PROPOSED SUMP, CLARIFIER, AND DRAIN CLOSURE SAMPLING PLAN

Reference Letter (See Drawing 2)	SUMPS	Previous Sampling Points	Previous Analysis	Proposed Closure Analysis and Number of Samples
A	Pump sump next to Bldg. 2 bleach tank	B-3 ✓	TPH-FC and pH	None 0
B	Polydrum sump north of Bldg. 2 lab.	B-4 ✓	TPH-FC, Form., VOCs, pH, and phenol. screen	None 0
C	Sump east of Bldg. 4 and old cooling tower	B-11	pH and Cr	ammon. ✓ 1
D	Drain sump by Bldg. 15	B-13	TPH-FC and Form.	TPH-FC and VOCs ✓ 2
E	Alkane unloading sump	✓ B-15, B-22, B-24, B-42, and H-1	TPH-FC	None 0
F	Storm water sump north of Bldgs. 6 and 7	✓ B-18	TPH-FC, pH, phos., and chlor.	None 0
G	Sump west of Bldg. 8	✓ B-17	pH	None 0
H	Sump east of Bldg. 1	None	None	chlor. ✓ 1
I	Southern sump next to Bldg. 2 chlorine tank	None	None	chlor. ✓ 1
J	Soda ash loader sump between Bldgs. 4 and 8	None	None	pH ✓ 2
K,L,M	Bldg. 5 sumps	None	None	pH and MBAS ✓ 3

Chlor. ≡ chloride

TABLE 1
PROPOSED SUMP, CLARIFIER, AND DRAIN CLOSURE SAMPLING PLAN

Reference Letter (See Drawing 2)	SUMPS	Previous Sampling Points	Previous Analysis	Proposed Closure Analysis and Number of Samples
N	Sump north of AST farm weigh station	None	None	pH, chlor, ammon., and TPH-FC 1 <i>MONS. dependent</i>
O ✓	Sump south of AST farm weigh station	None	None	pH, chlor, ammon., and TPH-FC 1
P ✓	Sump inside Bldg. 8	None	None	pH, chlor, ammon., and TPH-FC 1
Reference Letter (See Drawing 2)	CLARIFIERS	Previous Sampling Points	Previous Analysis	Proposed Closure Analysis and Number of Samples
Q ✓	Clarifier between Bldgs. 2 and 14	B-1	PCBs, TPH-FC, Form., VOCs, pH, Cr, phos., and chlor.	VOCs 2
R ✓	Clarifier near south gate	B-9	TPH-FC and pH	Not scheduled for closure
S ✓	Clarifier near storm water retention tanks	B-14	PCBs, TPH-FC, VOCs, and pH	Not scheduled for closure
T ✓	Clarifier southeast of Bldg. 15	B-13	TPH-FC and Form.	VOCs and TPH-FC 2
U	Clarifier east of Bldg. 8	None	None	pH, chlor, ammon., and TPH-FC 2

TABLE 1
PROPOSED SUMP, CLARIFIER, AND DRAIN CLOSURE SAMPLING PLAN

Reference Letter (See Drawing 2)	DRAINS	Previous Sampling Points	Previous Analysis	Proposed Closure Analysis and Number of Samples
V ✓	Trench drain between Bldgs. 1 and 14	B-2 and B-1	pH, Cr, phos., chlor. PCBs, TPH-FC, and Form.	chlor., ammon., VOCs, and Form. 4
W ✓	Drain east of Bldg. 8	B-25	PCBs, TPH-FC, Form., VOCs, and pH	None 0
X	Drain east of Bldg. 4 and old cooling tower	B-11	pH and Cr	ammon. 1
Y	Storm drain near south gate	None	None	VOCs and pH 1
Z,A1,B1,C1	Storm drains outside of Bldg. 6	None	None	TPH-FC, pH, chlor., and MBAS 4
D1,E1	Storm drains southwest of Bldg. 1	None	None	chlor. and pH 2
F1,G1,H1	Storm drains north of Bldg. 7	None	None	MBAS and pH 3
I1	Bldg. 5 floor drain	None	None	MBAS and pH 5
J1	Bldg. 8 trench drain	None	None	TPH-FC, ammon., pH, and chlor. 3
K1	Storm drain east of Bldg. 14	None	None	chlor. and pH 1

Notes:

TPH-FC = Total Petroleum Hydrocarbons (Fuel Characterization) analyzed using U.S. EPA Method 8015 Modified.

Form. = Formaldehyde analyzed using Method NCASI 487.

*what about TPH
9 VOCs*

TABLE 1
PROPOSED SUMP, CLARIFIER, AND DRAIN CLOSURE SAMPLING PLAN

Notes:

VOCs = Volatile Organic Compounds analyzed using U.S. EPA Method 8010 or 8260.

phenol. = Phenolphthalein screen.

Cr = Total chromium analyzed using U.S. EPA Method 7190.

phos. = Phosphates analyzed using U.S. EPA Method 300.

chlor. = Chlorides analyzed using U.S. EPA Method 300.

MBAS = Methylene Blue Activated Substances analyzed using U.S. EPA Method 425.1.

ammon. = Ammonia analyzed using U.S. EPA Method 350.3 (Nitrogen - Ammonia-N).

PCBs = Polychlorinated biphenyls analyzed using U.S. EPA Method 8080.

Sampling Summary

Sample Location	Sample Designation
Main Facility	
Pumps and Clarifiers	
Clarifier between Buildings 2 and 14	B-1
Trench between Buildings 1 and 14	B-2
Pump sump next to the Building 2 bleach tank	B-3
Poly drum sump north of Building 2 lab	B-4
Clarifiers near south gate(s)	B-9
Sump east of Building 4 and its cooling tower	B-11
Drain sump by Building 15	B-13
Clarifier near stormwater retention tanks	B-14
Alkylate unloading sump	B-15
Stormwater sump north of Buildings 6 and 7	B-16
Underground and Aboveground Storage Tanks	
Former gasoline USTs near old garage area	B-5
Former diesel tank next to Firestone Blvd.	H-44, H-46
Former chlorine tanks	B-7
Soft brine tanks along railroad track	B-8
Former above and below underground storage tanks	B-10
Former alcohol tank	B-12
Former #2 fuel oil tank under Building 8	B-16
Above ground tank area east of Building 8	B-17
Shallow Sampling Locations	
Equipment cleaning pad by building 14	B-1
Drum fluid dispensing area by building 2	B-2
Maintenance area building 2	B-3
Four former storage tanks west of building 4	B-4
Four former storage tanks by building 4	B-5
Old cooling tower west of building 4	B-6
Chemical unloading area south of building 6	B-7
Oil compressor near building 7	B-8
Inside building 8	B-9
Adjacent to electric substation	B-10
Formaldehyde area	B-11
Above ground tank area west of building 8	B-12
Old cooling tower east of building 4	B-13
Alkylate Unloading Area	
	B-22
	B-23
	B-24
	B-43
	B-42
	B-50, B-53
Building 2 Maintenance Area	
	B-30
	B-31
	B-32
Formaldehyde Drum Area	
	B-25
Building 8 Diesel Tank Area	
	B-29
	B-15
Former fuel oil tank area	
	B-45
Alkylate unloading sump	
	H-1
Sludge sample from Dial facility surface drain/sump	
	SS-1
	SS-2
	SS-3
Liquid sample from Dial facility sump	
	LS-1

1 - 0354 (COOLING UNIT)
2 - 0143 (BRINE TANK)
3 - ? (BRINE TANK)
4 - 0144 (BRINE TANK)
5 - 0363 (COOLING UNIT)

73 - 0603 PLASTIC RESIN
74 - 0501 PLASTIC RESIN
75 - 0502 PLASTIC RESIN
76 - 0500 PLASTIC RESIN
77 - 0504 PLASTIC RESIN
78 - 0544 PLASTIC RESIN
79 - 0505 PLASTIC RESIN
80 - 0598 PLASTIC RESIN

81 - 0491 FINISHED PRODUCT
82 - 0492 FINISHED PRODUCT
83 - 0493 FINISHED PRODUCT
84 - 0494 FINISHED PRODUCT
85 - 0495 FINISHED PRODUCT
86 - 0496 FINISHED PRODUCT
87 - 0497 FINISHED PRODUCT

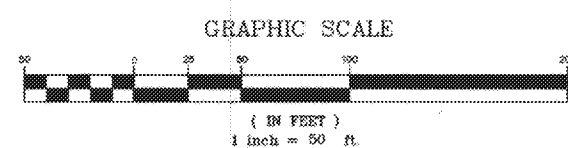
64 - 0126 DETERGENT
64A - 0124 WET COLLECTOR/DUST SCRUBBER
65 - 0126 DETERGENT
66 - 70646 DETERGENT
67 - 0141 DETERGENT
68 - 0136 DETERGENT
69 - 0138 DETERGENT
70 - 0137 WET COLLECTOR/DUST SCRUBBER
71 - ? DETERGENT (SPRAY DRYER)
71A - ? PRP MIX
72 - 10678 DETERGENT (SPRAY DRYER)
72A - ? PROCESS TANK

67 - 0108 DETERGENT
68 - 0109 DETERGENT
69 - 0110 DETERGENT
60 - 0111 DETERGENT
61 - 0112 DETERGENT
62 - 0114 DETERGENT
63 - 0113 DETERGENT

61 - 0076 (NACL)
62 - 0075 (NACL)
63 - 0087 (SODA ASH)
64 - 0088 (SODA ASH)
65 - 0094 (SILICA)
66 - 0093 (SILICA)

NOTE:

1.) UST = UNDERGROUND STORAGE TANK



REV	DATE	DESCRIPTION	OWN BY	DES BY	CHK BY	APP BY
1	1/23/86	DES BY	CK	APP BY	MD	

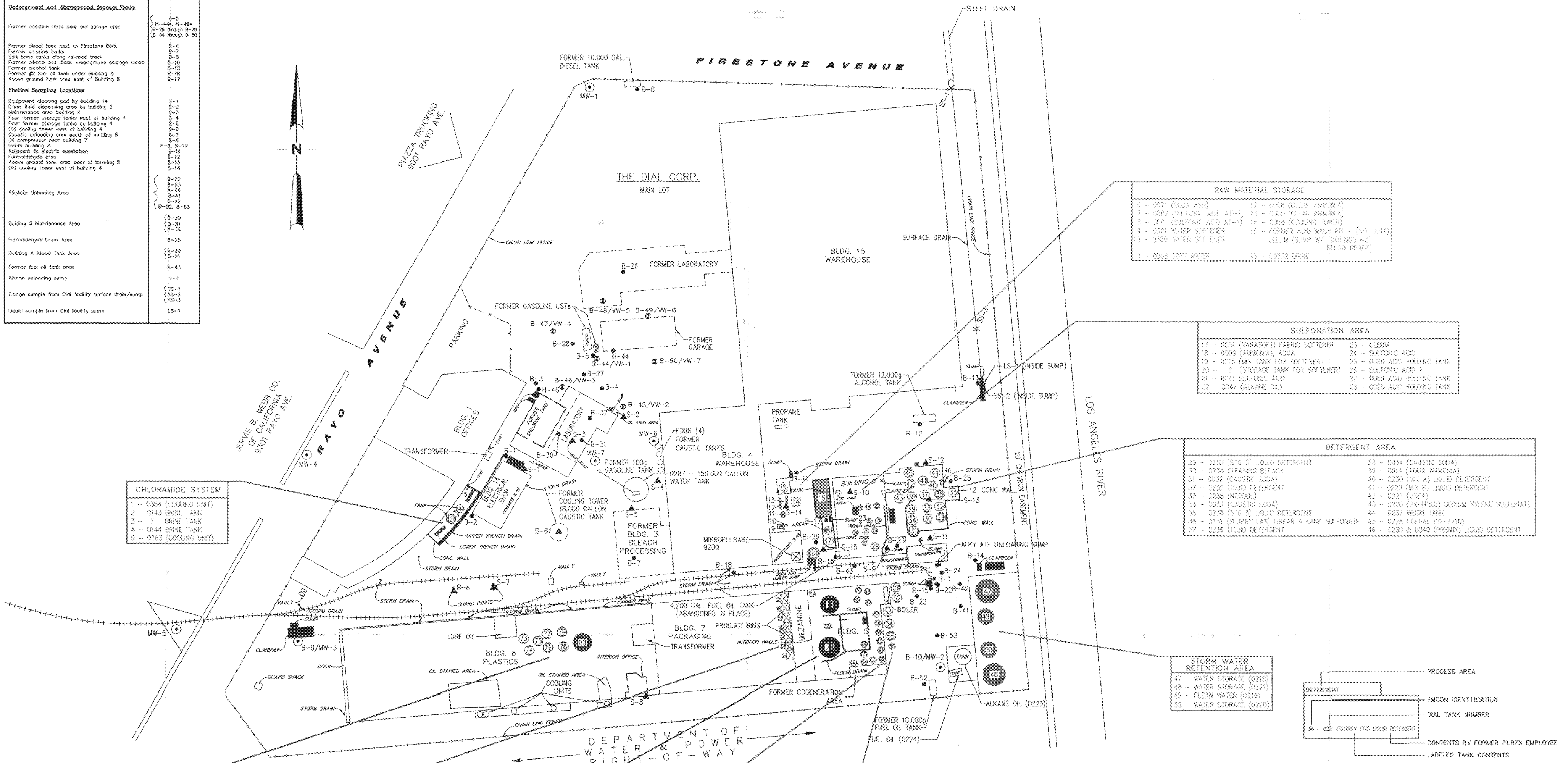


THE DIAL CORPORATION
MAIN FACILITY
9300 RAYO AVENUE
SOUTH GATE, CALIFORNIA

SITE PLAN

DRAWING NO.
1
PROJECT NO.
22493-001.007

CADD FILE-UPDATE
DATE LAST REVISED 05/08/95

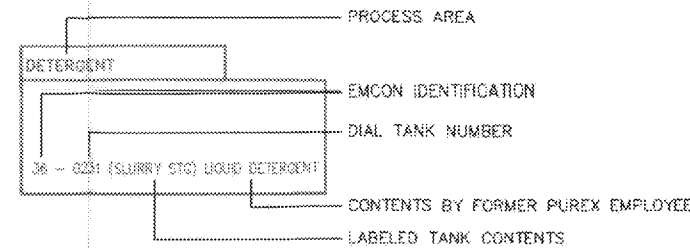


RAW MATERIAL STORAGE	
6 - 0071 (SODA ASH)	12 - 0086 (CLEAR AMMONIA)
7 - 0002 (SULFONIC ACID AT-2)	13 - 0005 (CLEAR AMMONIA)
8 - 0001 (SULFONIC ACID AT-1)	14 - 0068 (COOLING TOWER)
9 - 0301 WATER SOFTENER	15 - FORMER ACID WASH PIT - (NO TANK)
10 - 0300 WATER SOFTENER	16 - 0000 (SUMP W/ FOSPHING - 4)
	17 - 0032 (BRINE)

SULFONATION AREA	
17 - 0051 (VARASOFT) FABRIC SOFTENER	25 - GLEUM
18 - 0009 (AMMONIA) AQUA	24 - SULFONIC ACID
19 - 0015 (MIX TANK FOR SOFTENER)	26 - 0005 ACID HOLDING TANK
20 - ? (STORAGE TANK FOR SOFTENER)	27 - SULFONIC ACID ?
21 - 0041 SULFONIC ACID	28 - 0059 ACID HOLDING TANK
22 - 0047 (ALKANE OIL)	29 - 0025 ACID HOLDING TANK

DETERGENT AREA	
23 - 0233 (STG 3) LIQUID DETERGENT	38 - 0034 (CAUSTIC SODA)
24 - 0234 CLEANING BLEACH	39 - 0014 (AQUA AMMONIA)
25 - 0032 (CAUSTIC SODA)	40 - 0230 (MIX A) LIQUID DETERGENT
26 - 0232 LIQUID DETERGENT	41 - 0229 (MIX B) LIQUID DETERGENT
27 - 0235 (NEURAL)	42 - 0227 (UREA)
28 - 0233 (CAUSTIC SODA)	43 - 0228 (PK-HALO) SODIUM XYLENE SULFONATE
29 - 0238 (STG 5) LIQUID DETERGENT	44 - 0237 WASH TANK
30 - 0231 (SLURRY LAS) LINEAR ALKANE SULFONATE	45 - 0218 (HEPAC CO-7710)
31 - 0236 LIQUID DETERGENT	46 - 0239 & 0240 (PREMIX) LIQUID DETERGENT

STORM WATER RETENTION AREA	
47 - WATER STORAGE (0218)	
48 - WATER STORAGE (0221)	
49 - CLEAN WATER (0219)	
50 - WATER STORAGE (0220)	



EXPLANATION

- B-44/VW-1 - EXPLORATORY BORING CONVERTED TO VAPOR EXTRACTION WELL
- MW-1 - GROUNDWATER MONITORING WELL
- B-1 - EXPLORATORY SOL BORING
- H-1 - HAND AUGER BORING
- H-14 - SURFACE SAMPLE LOCATION
- S-1 - SLUDGE SAMPLE
- SS-1 X - SLUDGE SAMPLE
- LS-1 - LIQUID SAMPLE
- WASTE MANAGEMENT FACILITIES THAT HAVE BEEN PREVIOUSLY ASSESSED
- WASTE MANAGEMENT FACILITIES THAT HAVE NOT BEEN ASSESSED TO DATE